

Title (en)
OPTO-ELECTRICAL DEVICES INCORPORATING METAL NANOWIRES

Title (de)
OPTO-ELEKTRISCHE VORRICHTUNGEN MIT METALLNANODRÄHTEN ENTHALTENDER ELEKTRODE

Title (fr)
DISPOSITIFS OPTO-ÉLECTRIQUES AVEC ÉLECTRODE COMPRENANT DES NANOFILS MÉTALLIQUES

Publication
EP 3550629 A3 20191225 (EN)

Application
EP 19170557 A 20121012

Priority
• US 201161546938 P 201111013
• US 201261593790 P 20120201
• EP 12778915 A 20121012
• US 2012060101 W 20121012

Abstract (en)
The present disclosure relates to OLED and PV devices including transparent electrodes that are formed of conductive nanostructures and methods of improving light out-coupling in OLED and input-coupling in PV devices.

IPC 8 full level
H01L 51/52 (2006.01); **H10N 10/856** (2023.01); **H01B 1/22** (2006.01); **H01L 31/0224** (2006.01); **H01L 51/44** (2006.01)

CPC (source: EP KR US)
H01B 1/22 (2013.01 - EP US); **H01L 31/022491** (2013.01 - US); **H01L 31/0232** (2013.01 - US); **H01L 31/1884** (2013.01 - US); **H01L 33/58** (2013.01 - US); **H05B 33/28** (2013.01 - EP US); **H10K 30/80** (2023.02 - US); **H10K 50/00** (2023.02 - US); **H10K 50/115** (2023.02 - KR); **H10K 50/81** (2023.02 - US); **H10K 50/828** (2023.02 - EP KR US); **H10K 50/85** (2023.02 - US); **H10K 50/854** (2023.02 - EP KR US); **H10K 50/858** (2023.02 - EP KR); **H10K 71/00** (2023.02 - US); **H10K 71/611** (2023.02 - US); **H10K 71/621** (2023.02 - US); **H10K 71/80** (2023.02 - EP); **H10K 30/35** (2023.02 - EP KR); **H10K 30/50** (2023.02 - EP KR); **H10K 30/82** (2023.02 - EP KR US); **H10K 50/814** (2023.02 - EP KR); **H10K 50/858** (2023.02 - US); **H10K 50/86** (2023.02 - EP KR US); **H10K 71/60** (2023.02 - EP); **H10K 2102/331** (2023.02 - EP US); **Y02E 10/549** (2013.01 - EP US); **Y02P 70/50** (2015.11 - EP US)

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Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2013056155 A2 20130418; WO 2013056155 A3 20130704; EP 2766939 A2 20140820; EP 2766939 B1 20190424; EP 3550629 A2 20191009; EP 3550629 A3 20191225; JP 2014534572 A 20141218; JP 6195836 B2 20170913; KR 101999253 B1 20191001; KR 20140095488 A 20140801; KR 20190092492 A 20190807; TW 201321299 A 20130601; TW I576310 B 20170401; US 10367141 B2 20190730; US 10636970 B2 20200428; US 10964890 B2 20210330; US 2013105770 A1 20130502; US 2014175407 A1 20140626; US 2015287955 A1 20151008; US 2017133595 A1 20170511; US 2018159040 A1 20180607; US 2019319192 A1 20191017; US 2020259092 A1 20200813; US 8637859 B2 20140128; US 9076988 B2 20150707; US 9559335 B2 20170131; US 9905763 B2 20180227

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US 2012060101 W 20121012; EP 12778915 A 20121012; EP 19170557 A 20121012; JP 2014535956 A 20121012; KR 20147012831 A 20121012; KR 20197019299 A 20121012; TW 101137969 A 20121015; US 201213651128 A 20121012; US 201314109164 A 20131217; US 201514746105 A 20150622; US 201715415105 A 20170125; US 201815877683 A 20180123; US 201916454258 A 20190627; US 202016859071 A 20200427